The Klamath Network will make every effort to comply with the NPSafe program and with local park safety programs. KLMN takes safety seriously and it is the number one priority when developing and implementing these protocols. Crews are expected to be trained on all safety aspects of this project prior to entering the field.

The vision of the NPSafe program is:

"The NPS is widely recognized for providing world-class resource stewardship and visitor experiences. Just as the NPS excels at protecting natural and cultural resources and serving park visitors, the NPS can excel in providing our employees with a safe work environment. All employees deserve the opportunity to do their jobs safely and effectively so they can go home healthy at the end of the day to fully enjoy their lives and families."

#### The beliefs of the NPSafe program are:

We believe that healthy productive employees are our most important resource, and employee safety is our most important value

- Injuries and occupational illnesses are unacceptable and all are preventable
- At risk behaviors can be eliminated
- Operating hazards and risks can be controlled
- Safety is everyone's responsibility
- Managing for safety excellence can enhance employee productivity, save millions of dollars in workers compensation costs, and improve overall management effectiveness.

#### The goals of the NPSafe program are:

- 1) The NPS becomes the safest place to work in DOI.
- 2) Safety is integrated into all NPS activities.
- 3) The NPS organizational culture values employee safety as much as it values protecting resources and serving visitors.
- 4) Employees, supervisors, and managers demonstrate unwavering commitment to continuous improvement in employee health and safety.

To meet these goals, the KLMN has included several Job Hazard Analyses (JHA) in this appendix that should be followed while implementing this protocol.

JOB HAZARD ANALYSIS	(JHA)	Date: 11/21/2009		
Park Unit: KLMN	Division: IMD	Branch: NRPC	Location: Ashland, Oregon	
Task Title: Driving vehicles in the cou	urse of one's job	JHA Number: KLMN JHA 1 Page: 1 of 4		
Job Performed By: ALL	Analysis By: Jaime Stephens	Supervisor: Jaime Stephens	Approved By: Sean Mohren	
Required Standards and General Notes:	Employees driving as part of their duties must	Employees driving as part of their duties must have a valid state issued driver's license.		
Required Training:	Standard drivers training and need to know ho	w to change tires.		
Required Personal Prospective Equipment:	Seatbelts must be used.			
Tools and Equipment:	Vehicle			
Sequence of Job Steps	Potential Hazards	Safe Action	or Procedure	
Starting vehicle, basic operation	<ul> <li>Lights not functioning, visibility impaired.</li> <li>Brakes non-functional</li> <li>Low tire pressure</li> <li>Low fluid levels</li> <li>Spare tire not in vehicle or deflated</li> <li>Low gas</li> </ul>	<ul> <li>Test headlights, turn signals, brake lights, breaks, tire pressure and all fluids</li> <li>Check status of spare; insure that jack, properly sized light wrench and all necessary tools are present in vehicle.</li> <li>Check gas</li> </ul>		
Using 4 wheel drive, if applicable.	<ul> <li>Not knowing how to engage, getting stuck in the field</li> <li>Unsafe driving procedures due to perceived safety of 4 wheel drive</li> </ul>	<ul> <li>Engage 4 wheel drive prior to rough conditions</li> <li>Use 4 wheel drive when increased traction is necessary</li> </ul>		
Driving in reverse	Hitting objects, people, wildlife	<ul> <li>Check area behind vehicle prior to leaving site</li> <li>Use a person outside the vehicle (other crew member) t direct traffic.</li> <li>Back into parking spots, so leaving sites after long field ceasier.</li> </ul>		

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 1	Page: 2 of 4		
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure			or Procedure
Transporting gear and heavy equipment	<ul> <li>Gear flying around, hitting driver and passenger in accident</li> <li>Damage to gear during turns or stops</li> </ul>	<ul> <li>Ensure that gear is adequately stowed.</li> <li>If the gear comes with protective gear (e.g., electrof properly stow in container.</li> <li>Do not put gear on top of vehicle; stow inside.</li> </ul>			
Passenger/driver safety	• Distracted driving	<ul> <li>Wear seatbelts at all times we</li> <li>Practice safe and defensive of</li> <li>Obey traffic laws.</li> <li>Do not text or talk on cell phe</li> <li>Keep windshields clean.</li> <li>Drive with both hands on the</li> <li>Do not pick up hitch hikers.</li> <li>Use turn signals/indicators</li> <li>Know, in advance, where you</li> <li>Make sure seat and mirrors at</li> <li>Use headlights, even during</li> </ul>	Iriving habits.  ones.  wheel.  are going.  are properly adjusted for driver		
	<ul> <li>Driving on narrow, single lane roads with bumpy or "washboard" surfaces.</li> </ul>	<ul> <li>Maintain a safe speed (this n</li> <li>Stay to the right, especially concoming traffic.</li> <li>If turning around, "face the concoming traffic towards a steep slope, instead cliff.</li> </ul>	danger," in other words, turn		
	<ul> <li>Driving with limited visibility, as in heavy rain, fog, or dust.</li> </ul>	<ul> <li>Slow down.</li> <li>If necessary, wait for hazard</li> <li>Drive with lights on. In some penetrate better than brights.</li> </ul>	•		

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 1 Page: 3 of 4	
Sequence of Job Steps	Potential Hazards	Safe Action	or Procedure
Passenger/driver safety	• Fatigue driving	<ul> <li>Be aware of signs of fatigue.</li> <li>necessary, eat a snack, or have not drive.</li> </ul>	Pull over and catnap if a partner drive. If in doubt, do
	• Storm conditions (snow, mud, wind)	<ul> <li>Keep informed of the weather</li> <li>If excess wind (tree top sway postponing trip.</li> <li>Avoid wet clay roads as much</li> </ul>	ing, twigs falling) consider
	• Road obstacles		eport to the park staff. ck tire conditions (wear, nage. down! Be aware of high animal iately. It is better to "ride out" an
Working/Parking on or near a roadside	●Being hit by a car	<ul> <li>Stay off of the road.</li> <li>Use pullouts or secondary ro</li> <li>Be aware of the traffic.</li> <li>Walk on the side of the road</li> </ul>	

JOB HAZARD ANALYSIS	S (JHA)	JHA Number: KLMN JHA 1	Page: 4 of 4
Sequence of Job Steps Potential Hazards		Safe Action	or Procedure
Working/Parking on or near a roadside	•Running into objects, parking too far off the road, getting stuck, rolling vehicle	<ul><li>Park on stable surface.</li><li>Don't park on a blind corner</li><li>Set parking break.</li></ul>	or a solid striped road area
Constructions and forces that	Description of Task When it	, ,	
Crew returns safe from the	field day/season, with no injuries, dam	ages, or law suit.	

JOB HAZARD ANALYSIS	(AHL)	Date: 11/21/2009	
Park Unit: KLMN	Division: IMD	Branch: NRPC	Location: Ashland, Oregon
Task Title: Remote field site access/		JHA Number: KLMN JHA 2	Page: 1 of 3
lob Performed By: ALL	Analysis By: Jaime Stephens	Supervisor: Jaime Stephens	Approved By: Sean Mohren
Required Standards and General Notes:	Crew members should be physically fit		
Required Training:	None required.		
Required Personal Prospective Equipment:	Footwear appropriate to terrain (probably hik park radio with charged batteries, GPS units, e		brush or poison oak; Tec-nu poison oak wash,
Tools and Equipment:		T	
Sequence of Job Steps	Potential Hazards	Safe A	Action or Procedure
Hiking on and off trails	• Getting lost	<ul> <li>Allow ample time to access si</li> <li>Bring safety gear (e.g., radio);</li> <li>Look at notes from crews that</li> </ul>	; extra clothes, water, food, etc.
	• Physical injury (e.g., twisted ankle, broken bones)	<ul> <li>above the ankle, broken in prio</li> <li>Walk cautiously and don't rur</li> <li>Take breather breaks as nece</li> <li>Stay physically fit.</li> <li>Know basic first aid.</li> <li>Be trained in radio SOP.</li> <li>Avoid talus slopes. On steep steep</li> </ul>	n.
	<ul> <li>Getting hit with tool, implement, or</li> </ul>	<ul> <li>Maintain 6 foot spacing</li> <li>Warn people behind of "snap glasses (or other glasses).</li> </ul>	p-back" from vegetation branches; wear safety

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 2	Page: 2 of 3
Sequence of Job Steps	Potential Hazards	Safe Act	tion or Procedure
	• Blisters	<ul> <li>Plan your route so that hazardous terrain is minimized and the us maximized.</li> <li>Do not travel alone (e.g., if one crew member is faster, only trave your slowest person).</li> </ul>	
Hiking on and off trails	• Carrying heavy loads		
	• Loose footing; falls, broken bones, etc.		
	Branches and trees, other dangerous obstacles		

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 2	Page: 3 of 3
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Wildfires	Exposure to smoke and fire	<ul> <li>Don't panic. Be alert. Keep calm. Think clearly &amp; act decisively. Get out of area immediately.</li> <li>Maintain communication with other crew members and with dispatch. Fo local district policies regarding reporting fire.</li> </ul>	
		<ul> <li>Choose stream crossing routes by scouting the area first</li> <li>Avoid crossing when water levels are higher than knee height. Avoid crossing on logs whenever possible.</li> <li>Use a stick or pole to secure footing. Place it upstream at a slight angle. Use pole to test for depth &amp; walk to the pole.</li> </ul>	
Water Crossing	Loose footing; falls, broken bones, etc.	<ul> <li>Stay out of areas with swift current, especially after heavy snowfall, rain, of spring melt.</li> <li>Use footwear with non-slip soles while walking in streams. Do not wear sandals in streams.</li> <li>When possible, step on streambed proper instead of the tops of boulders may be slippery.</li> </ul>	
Crew returns safe from the field day	<b>Description of Task V</b> //season, with no injuries, damages, or law suit.	Vhen it is Done Safely	

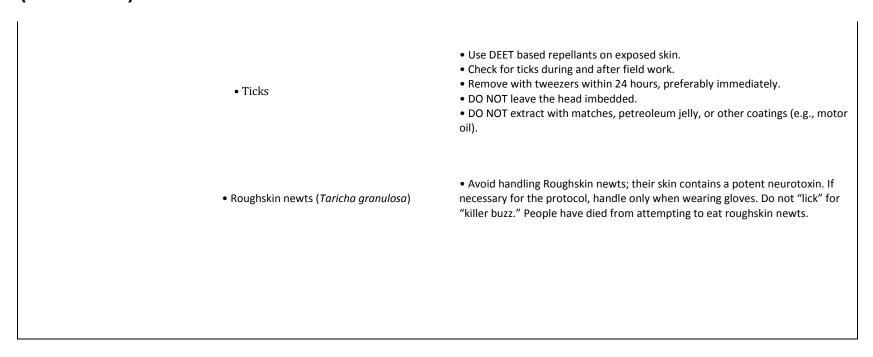
JOB HAZARD ANALYSIS (	(JHA)	Date: 11/21/2009	
Park Unit: KLMN	Division: IMD	Branch: NRPC	Location: Ashland, Oregon
Task Title: Environmental Exposure	ask Title: Environmental Exposure		Page: 1 of 3
Job Performed By: ALL	Analysis By: Jaime Stephens	Supervisor: Jaime Stephens	Approved By: Sean Mohren
Required Standards and General Notes:	Field crew members in the field are expected to use common sense in dealing with exposure to elements or wildlife. Ideally, they have experience in outdoor work prior to initiating the field season.		ith exposure to elements or wildlife. Ideally,
Required Training:	None required.		
Required Personal Propective Equipment:	Appropriate clothing for conditions.		
Tools and Equipment:			
Sequence of Job Steps	Potential Hazards	Safe A	Action or Procedure
Being outdoors, far from facilities for long time periods	• Hypothermia	<ul> <li>Consult First Aid book for treatment.</li> <li>Seek assistance.</li> <li>Recognize the signs: Shivering; Numbness; Drowsiness; Muscle Weakness; Dizziness; Nausea; Unconsciousness; Low, weak pulse; Large pupils.</li> <li>Practice prevention: stay dry; wear appropriate clothing; cotton kills; wear layers, shed layers as needed (don't overheat as sweat can cause hypothermi watch or listen to the weather forecast (see Radio SOP), and plan accordingly stay hydrated, cover head with warm clothing, stay active.</li> <li>Be aware of the role that wind-chill can play in hypothermia; under certain conditions, hypothermia can occur without any rain or being wet.</li> </ul>	

	• Hyperthermia (heat exhaustion; heat stroke)	<ul> <li>Consult First Aid book for treatment but generally get the victim to cooler conditions. NOTE: HEAT STROKE IS A LIFE THREATENING CONDITION.</li> <li>Recognize signs: above normal body temps; headaches, nausea, cramping, fainting, increased heart rate, pale and clammy skin, heavy sweating, etc.</li> <li>Practice prevention: Stay hydrated: in the midst of the summer, it may be necessary to drink 1 liter of water per hour; wear a broad brimmed hat; take rest stops in shade.</li> </ul>	
JOB HAZARD ANALYSIS (	JHA)	JHA Number: KLMN JHA 3 Page: 2 of 3	
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Being outdoors, far from facilities for long time periods	• Electrical Storms – lightning	<ul> <li>Watch the sky for signs of thunderstorms and seek shelter before the weather deteriorates.</li> <li>Stop work in streams and lakes.</li> <li>If caught in electrical storms, seek shelter inside a vehicle or building; keep away from doors and windows, plugged in appliances, and metal. Avoid contact with metal objects in vehicles.</li> </ul>	
	• Electrical Storms – lightning	<ul> <li>Do not use telephones.</li> <li>If outside with no shelter, do not congregate. In case of lightning strike, someone must be able to begin revival techniques (e.g., CPR).</li> <li>Do not use metal objects.</li> <li>Avoid standing near isolated trees.</li> <li>Seek lower elevations such as valleys or canyons; avoid being on peaks and trees.</li> <li>If you feel your hair standing on end and your skin tingling, this is a sign that lightning might be about to strike – crouch immediately (feet together, hands on knees).</li> </ul>	
	• Sunburn	<ul> <li>The risk of sunburn is higher when working at high elevations, or when working around water (from reflection). In these conditions, you can be burned even in overcast conditions.</li> <li>Wear protective clothing and use sunscreen.</li> </ul>	

High wind events	down trees, causing hazardous co	windthrows" where strong winds can blow nditions to field personnel. Crews should ibiting obvious previous wind damage.
(JHA)	JHA Number: KLMN JHA 3	Page: 3 of 3
Potential Hazards	Safe Ac	tion or Procedure
Altitude sickness	<ul><li>headedness; unable to catch your</li><li>Practice prevention: acclimate to</li><li>If symptoms progress and include</li></ul>	o high elevations slowly and stay hydrated. de: difficulty breathing, chest pain, confusion, if balance, descend to lower elevations
• Giardia	<ul> <li>Treat, filter, or boil all drinking w streams, lakes, or springs.</li> </ul>	vater. Do not drink untreated water from
Description of Task	When it is Done Safely	
eason, with no injuries, damages, or law suit		
	(JHA)  Potential Hazards  • Altitude sickness  • Giardia  Description of Task	High wind events  down trees, causing hazardous co avoid areas during high wind, exhibiting high wind, ex

JOB HAZARD ANALYSIS	(JHA)	Date: 11/21/2009	
Park Unit: KLMN	Division: IMD	Branch: NRPC	Location: Ashland, Oregon
Task Title: Wildlife and Botanical Expo	osure	JHA Number: KLMN JHA 4	Page: 1 of 4
Job Performed By: ALL	Analysis By: Jaime Stephens	Supervisor: Jaime Stephens	Approved By: Sean Mohren
Required Standards and General Notes:	Field crew members in the field are expected to use common sense in dealing with exposure to elements or wildlife. Ideally, they have experience in outdoor work prior to initiating the field season.		
Required Training:	None required.		
Required Personal Prospective Equipment:	Appropriate clothing for conditions.		
Tools and Equipment:			
Sequence of Job Steps	Potential Hazards	Safe A	Action or Procedure
Driving to the site	Animal in the road	9	animal traffic areas and drive appropriately. It is rather than a sudden swerve. This is true for els to cattle.

Being in the field	• Rattlesnakes	someone for aid.	n you cannot see the otherside essional medical attention if possible send your heart, cover wound with sterile bandage
JOB HAZARD ANALYSIS	(JHA)	JHA Number: KLMN JHA 4	Page: 2 of 4
Sequence of Job Steps	Potential Hazards	Safe A	Action or Procedure
Being in the field	• Bears	<ul> <li>Be alert and stay calm.</li> <li>If you encounter a bear, give it as much room as possible.</li> <li>Try to leave the area but DO NOT RUN. Back away slowly, but if the bear follows, stop and hold your ground.</li> <li>Wave your arms, make yourself look big, and talk in a normal voice</li> <li>If the bear makes contact, surrender! Fall to the ground and play dead. Typically, a bear will break off its attack once it feels the threat has been eliminated. If the bear continues to bite after you assume a defensive postu the attack is predatory and you should fight back vigorously.</li> </ul>	
	• Mountain Lions		ic. not run; you may stimulate its predatory let it know that you are not prey. FIGHT BACK.



JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 4 Page: 3 of 4	
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Being in the field	• Insect Sting	<ul> <li>Do not provoke insects by swatting at them. Remain calm and move away from the area.</li> <li>Be alert for buzzing insects both on the ground and in the air. Walk around any nests you encounter. Inform others of nests.</li> <li>Flag if necessary. Wear long sleeved shirt and pants. Tuck in shirt. Wear brig colors. Perfumes &amp; metal objects may attract bees.</li> <li>If stung, scrape stinger off skin. Cold can bring relief. Do not use tweezers. Tweezers can squeeze venom sac and worsen injury.</li> <li>If you are allergic, carry an unexpired doctor prescribed bee sting kit (EpiPer with you at all times.</li> <li>Know the allergic reactions of co-workers as well as the location of the bee sting kit. If victim develops hives, asthmatic breathing, tissue swelling, or a drein blood pressure, seek medical help immediately. Give victim antihistamine (Benadryl or chol-amine tabs). Use EpiPen.</li> </ul>	ght en) rop

		<ul> <li>Prevent bug/mosquito bites by using repellent. Spray on clothing to avoid prolonged exposure to skin. Wear long sleeved shirts and pants.</li> <li>Be aware of insect transmitted diseases (West Nile Virus, Lyme Disease, Plague).</li> </ul>
Being in the field	• Rabies	Be aware of animals acting strangely. If bitten by a wild or domestic animal get medical attention and report to local health authorities or animal control officer. Locate animal if possible. Follow accident procedures for animal bites.

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 4	Page: 4 of 4
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Encountering irrigation pipes, marijuana plantation, or grow operations.	Unfriendly encounters with criminal elements	<ul> <li>Do not wear uniforms.</li> <li>Carry radio in backpack, not visible.</li> <li>Act like tourists (AKA, act dumb).</li> <li>Work in pairs of larger groups.</li> <li>If working in areas likely to contain operations, check in with park staff leaving vehicle and returning to vehicle.</li> <li>Do not confront strangers.</li> <li>Watch for suspicious vehicles and people and report to rangers.</li> <li>Watch for black piping or other signs.</li> <li>If finding a definite grow operation, LEAVE IMMEDIATELY, note location report to park ranger.</li> </ul>	

Travel, movement or work in area with Poison Oak	Allergic reaction to poison oak plants	<ul> <li>Learn to recognize Poison Oak.</li> <li>Avoid contact and wear long pants and long-sleeve shirts if travelling in dense areas.</li> <li>If skin contact is made, flush with cold water as soon as possible.</li> <li>DO NOT flush with warm water or use soap. This can open your pores and increase the reaction.</li> <li>Use Tec-nu or similar product to wash and rinse with cold water to remove oils (follow label instructions).</li> </ul>		
Description of Task When it is Done Safely  Crew returns safe from the field day/season, with no injuries, damages, or law suit.				

JOB HAZARD ANALYSIS	(JHA)	Date: 11/21/2009	
Park Unit: KLMN	Division: IMD	Branch: NRPC	Location: Ashland, Oregon
Task Title: Communication	Task Title: Communication		Page: 1 of 2
Job Performed By: ALL	Analysis By: Jaime Stephens	Supervisor: Jaime Stephens Approved By: Sean Mohren	
Required Standards and General Notes:			
Required Training:	Radio / Spot use		
Required Personal Prospective Equipment:			
Tools and Equipment:	Professional Grade Radio, SPOT Monitor	ring System	
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Radio communication	Communication not possible	<ul> <li>sure batteries are changed. Carry a second rechargeable battery as back up.</li> <li>Check in mornings and evenings. If in a dead zone, try to check in from a better location throughout the day. Be prepared to relay messages in an emergency. If you are working alone, be sure to check in and out with dispatch.</li> <li>Make sure that your supervisor knows your planned itinerary before you leave in case your radio fails. Follow crew-specific safety check in/check out procedures.</li> <li>Know which radio frequencies to use and which to monitor. Know who to call in case of an emergency. Know how to reach repeaters.</li> <li>Carry a list of employee call numbers. Be prepared to relay messages in an emergency.</li> <li>Keep messages short, less than 30 seconds per transmission. If a longer message is necessary, break every 30 seconds.</li> <li>Conserve batteries. Carry a spare and don't leave scanner on. Turn radio off over night. You life may depend on it.</li> </ul>	

JOB HAZARD ANALYSIS (JHA)		JHA Number: KLMN JHA 4	Page: 2 of 2
Sequence of Job Steps	Potential Hazards	Safe Action or Procedure	
Spot System	Communication not possible	<ul> <li>Make sure system is working before you leave the office or field station. Make sure batteries are changed. Carry a second rechargeable battery as back up.</li> <li>Make sure that your supervisor knows your planned itinerary before you leave in case your system fails. Follow crew specific safety check in/check out procedures.</li> <li>Make certain system is setup properly and includes an accurate contact list.</li> </ul>	
Crew returns safe from the field day/	<b>Description of Task W</b> season, with no injuries, damages, or law suit.	/hen it is Done Safely	